

State of Utah DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt Governor Ted Stewart Executive Director James W. Carter Division Director

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February 13, 1996

TO:

Board of Oil, Gas and Mining

THRU:

James W. Carter, Director

THRU:

D. Wayne Hedberg, Permit Supervisor/Lowell P. Braxton, Associate Director

FROM:

Anthony A. Gallegos, Senior Reclamation Specialist Add

RE:

Request for Board Approval, Amount and Form of Reclamation Surety, Harper Contracting, Inc. (Harper), Parley's Canyon Quarry, M/035/012, Salt Lake County,

Utah

The Division seeks Board approval of the amount and form of reclamation surety provided by Harper for the Parley's Canyon Quarry, located in Salt Lake County, Utah. The form of surety is a surety bond, with National Fire Insurance Company for the amount of \$36,800. The surety company is listed on the 1995 Federal Register listing of acceptable surety companies. This operation involves lands disturbed by previous mining operations. This is a small mine operation which is now expanding to large mine status.

Attached for your review are copies of the following documents:

- 1. Summary checklist
- 2. Location map
- 3. Executive summary
- 4. Reclamation surety estimate
- 5. Reclamation Contract (From MR-RC)
- 6. Surety bond (Attachment B MR Form 5)

Thank you for your time and consideration of this request.

jb Attachments M035012.brd



DOGM MINERALS PROGRAM

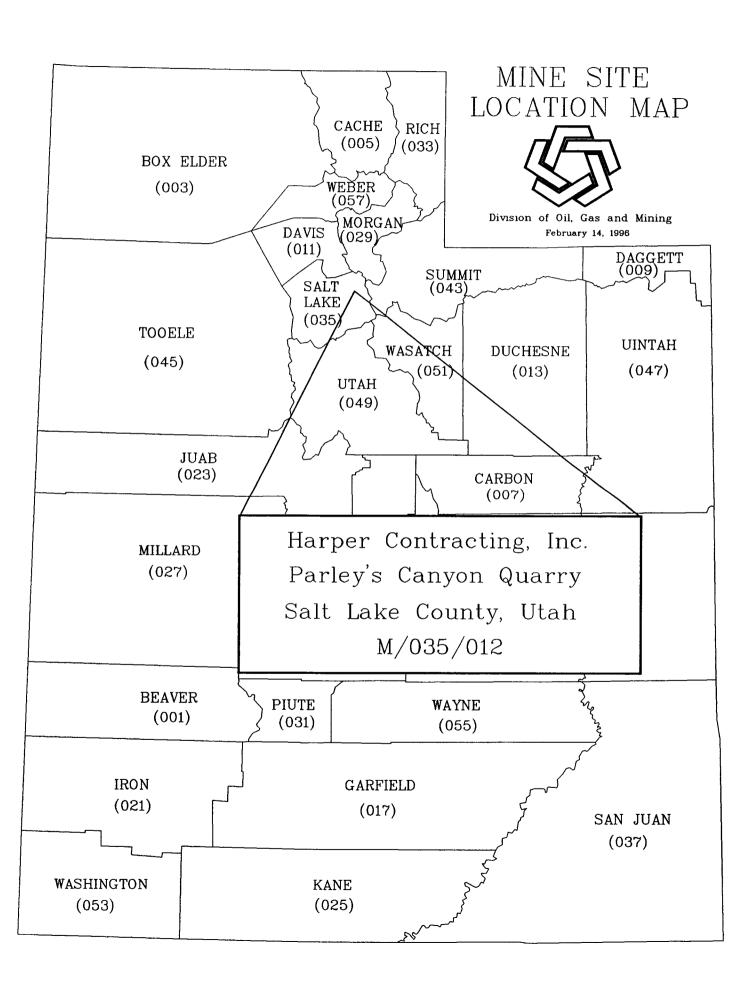
Checklist for Board Approval of FORM AND AMOUNT OF SURETY

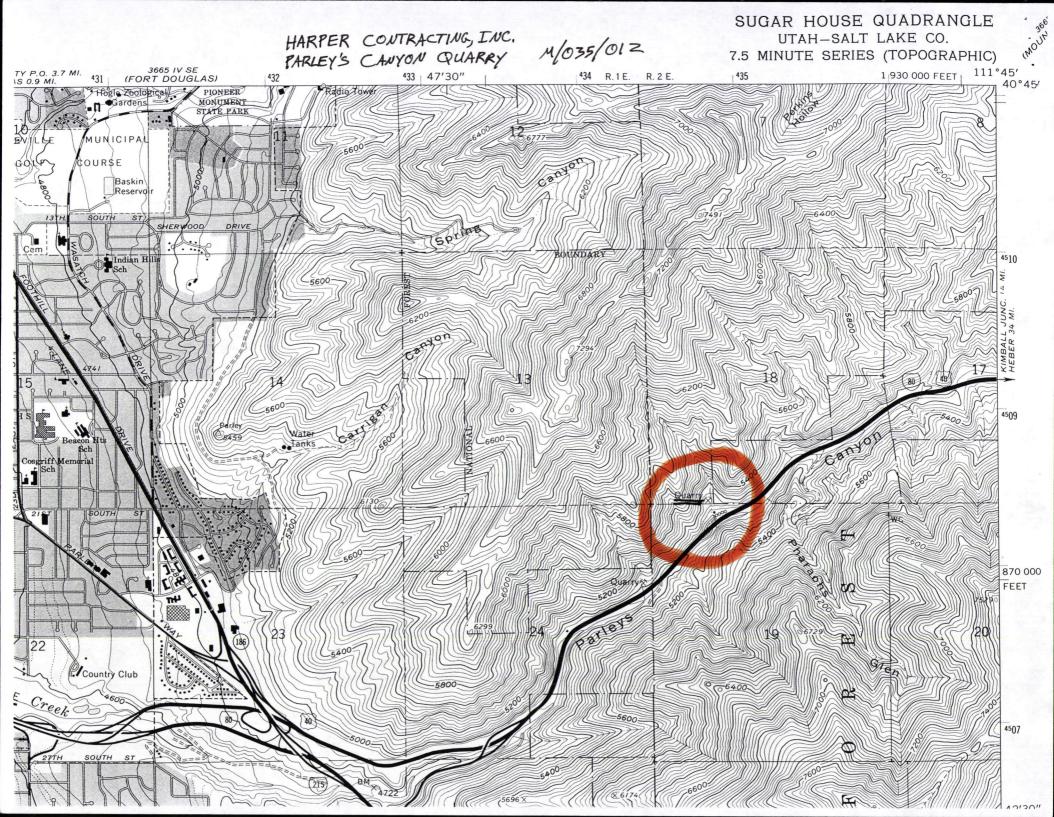
Prepared February 13, 1996

Company Name	Harper Contracting, Inc.
Mine Name	Parley's Canyon Quarry
File No.	M/035/012

Items	Provided Yes No		Remarks			
Executive Summary	X					
Location Map	X					
Reclamation Bond Estimate	Х					
Signed Reclamation Contract		х	Signed copy available by Board Hearing Date			
Signed Power of Attorney/ Affidavit of Qualification		Х	Signed copy available by Board Hearing Date			
Bond/Reclamation Surety	Х					
Surety Sign Off (Other State/Federal Agencies)		X	N/A			
RDCC contacted	X					

4:M035012.ckl





EXECUTIVE SUMMARY

Prepared February 13, 1996

ine Name: Parley's Canyon Quarry I.D. No: M/035/012				
Operator: Harper Contracting, Inc.	County: Salt Lake County			
4655 West 5415 South	New/Existing: SMO to LMO			
P.O. Box 18400	Mineral Ownership: Patented, State, USFS			
Kearns, Utah 84118	Surface Ownership: Patented, State, USFS			
Telephone: (801) 250-0132	Lease No.(s): ML-4559			
Contact Person: <u>Lawnie Mayhew</u>	Permit Term: Life of Mine			
Life of Mine: 10 years				
Legal Description: SW 1/4 Section 18, and NW 1/4 Section	19, Township 1 South, Range 2 East, SLBM			
Mineral(s) to be Mined: <u>Limestone</u> , <u>Mine products include</u> : <u>fill</u> , <u>run of mine (ROM)</u> , and <u>landscape rock</u> .	road base, sewer rock, concrete aggregate, engineered			
Mining Methods: Conventional open pit surface mining by d screened to product sizes.	rilling and blasting. Limestone is crushed and			
Acres to be Disturbed: Total disturbed area of 21.9 acres. Previously undisturbed area which will be disturbed is on 16.1 acres	• • •			
Present Land Use: mining				
Postmining Land <u>Use</u> : Continued quarrying operations, or we continued.	vildlife habitat in the event operations are not			

Variances from Reclamation Standards (Rule R647) Granted:

R647-4-111 Topsoil Areas disturbed prior to Harper's operations had no topsoil salvaged and stockpiled, therefore these areas are granted a variance to this rule. Previously undisturbed areas which will be disturbed are rocky and steep with minimal topsoil. These conditions make salvaging topsoil impractical. The undisturbed areas specifically granted this variance include: (1) the portion of the undisturbed "island" which will be disturbed(i.e. covered) by the final pit floor and final highwall, and (2) the northeast portion of this same undisturbed "island" which will be disturbed as a result of the new access roads on the steep terrain.

R647-4-111 Revegetation The Division standard of achieving 70% of pre-mining vegetative cover will not be applied to this site. Revegetation efforts at this site will be considered "successful" when the revegetation treatments have been preformed according to the approved plan. The performance of these treatments will need to be verified in the field by Division personnel.

Soils and Geology:

Soil Description: There is no topsoil within any of the areas which were previously mined and the areas proposed to be mined which were previously undisturbed are mainly limestone outcrop and talus slopes.

Page 2 Executive Summary M/035/012

pH: Unknown due to the lack of soil							
Special Handling Problems: None							

Geology Description: The project area is characterized by Cretaceous and Pennsylvanian sedimentary rock.

Hydrology:

Ground Water Description: These formations exhibit moderately low permeability, the primary porosity of the sediments is slight and there is only minimal secondary porosity due to the presence of joints or fractures (Healy, et al, 1971). There is no known groundwater of any significance in the vicinity, except for the existence of two intermittent springs which will not be impacted.

<u>Surface Water Description</u>: The surface water in this area is ephemeral in nature. Two intermittent springs outcrop west of the operation on Forest Service Property which may intersect, flow along side of, or cross the pit access road.

Water Monitoring Plan: There is no plan or requirement to monitor surface water at this time.

Ecology:

<u>Vegetation Type(s)</u>: <u>Dominant Species</u>: The area surrounding the mine site is typical oakbrush/mountain brush vegetation type, dominated by gambel's oak, bigtooth maple, and chokecherry with an understory of mules ears, oregon grape and bedstraw.

Percent Surrounding Vegetative Cover: Area surrounding the mine site 50% - 60%

Wildlife Concerns: No impacts to threatened or endangered species or their critical habitats are expected. The surrounding area is valuable deer and elk winter habitat. The reclamation plan is designed to provide a quality forage for these species.

<u>Surface Facilities</u>: A crushing and screening plant consisting of: a cone crusher, jaw crusher, a three deck screen, and associated conveyor equipment. A scale trailer will be on site and some miscellaneous equipment (fuel tanks, water tanks). All equipment will be mobile.

Mining and Reclamation Plan Summary:

During Operations:

Airtrack drills will be used to drill blast holes, although a larger production drill may be used to meet production requirements. The holes would then be loaded with ANFO and blasted. The blasted material will be pushed with a dozer to the southwest edge of the mining pit where it will run down a slope to the pit floor of previous quarry operations. The material is loaded into trucks using a front end loader or it is transferred to a crushing/screening plant for further processing. The products are trucked from the site for distribution. The outer lip of a ridge line will act as a visual buffer for the active quarry area. All new roads will be located on private lands. Existing roads on USFS land will also be used during operations.

Page 3 Executive Summary M/035/012

After Operations:

At the conclusion of mining, all trash, oil, fuel, equipment, debris and structures will be removed from the site. All remaining stockpiles of loose material would be graded down to slopes of 3H:1V or less. Any trenches would be backfilled to eliminate safety hazards. Highwalls will be left, as is, with a 3 foot high safety berm in place at the outer edge of the bench. The overall slope angle of the new quarry face would be 45° or less. Quarry benches will receive revegetation treatments. There will be no ponds or other impounding structures remaining after operations. Roads to be reclaimed will be regraded to eliminate the inner roadside ditches and to convey runoff across the road surface by adequately spaced water bars. Reclaimed roads and the processing area will be scarified to increase infiltration of water and enhance revegetation potential. The ripped and scarified areas will be treated with a diammonium phosphate fertilizer at a rate of 160 lbs/acre. The Division approved seed mix will be broadcast over the reclaimed areas. Mulching will be accomplished by adding clean alfalfa hay at a rate of 2-3 tons/acre or manure at a rate of 5 dry tons/acre. If alfalfa hay is used, a means of anchoring will be used (i.e. crimping, netting, etc.). Vehicle access to these reclaimed areas will be restricted by six foot high berms.

Surety:

Amount: \$36,800

Form: Surety Bond

Renewable Term: 5 years (2001)

jb M035012.exc

RECLAMATION ESTIMATE

Harper Contracting Inc.

Parley's Canyon Quarry

M/035/012 (ML-45599)

last revision

02/13/96

filename M35-12.WB2

page "ESTIMATE"

Salt Lake County

Prepared by Utah State Division of Oil. Gas & Mining

Details of Final Reclamation

- -This is a reformatted version of the 1-18-96 estimate provided by Harper
- -This project involves patented claims, a state lease (SITLA) & access across USFS
- -Previous operations did not salvage topsoil or topsoil is unavailable due to rock outcrops
- -All equipment, facilities, trash & debris will be removed during final reclamation
- -Pit highwalls will remain benched; sefety berms & gates will prevent public access
- -Remaining stockpiles & loose material will be regraded to 3h:1v configuration or less
- -New roads will be regraded & receive revegetation treatments
- -Reclaimed roads, pit floors & other surfaces will be riped to maximize infiltration
- -Revegetation will include scarifying/ripping, mulching, fertilizing & broadcast seeding
- -Acreage: pit highwall 6.3, pit floor 5.5, ore slide 1.6, operations 5.6, access roads 2.9
- -Permit area which was disturbed by previous operations is 16.7 acres.
- -Amount of disturbed area which will receive reclamation treatments

16.1 acres

-Estimated total disturbed area for the Parleys Canyon Mine =

21.9 acres

Activity	Quantity	Units	\$/unit	\$
Gates & signs (mtls & installation)	1	sum	700	700
Regrading processing area & loose mtls	2,000	CY	0.96	1,920
Safety berms on pit benches	480	CY	4.74	2,275
Sidecast mtl replacement - backhoe	380	CY	1.97	749
Ripping new pit access road	0.7	acre	410	287
Ripping pit floor	9.9	acre	410	4,059
Water bar construction	6.3	CY	1.97	12
Equipment removal - trucking	11	trips	345	3,795
Equipment removal - FE loader	2	days	1,050	2,100
Equipment removal - supervision	16.0	hours	30	480
Mulching (2-3 ton/acre)	16.1	acre	475	7,648
Fertilizing (160 lb/acre diammonium phosphate	16.1	acre	150	2,415
Broadcast seeding (11.5 lb/acre)	16.1	acre	67	1,079
General site cleanup & trash removal	16.1	acre	50	805
Reclamation supervision (est 4 days)	32	hours	30	960
		Subtotal		29,283
10% Contingency		- 1		2,928
		Subtotal		\$32,212
Escalate for 5 years at 2.68% per yr		N .		4,554
		Total		\$36,766
Round	led surety	amount in	yr 2001-\$	\$36,800
Average cost per disturbed acre =	\$1,680			